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PATENT

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controlling operation of the machine in accordance with user-specific information, when there is a match of fingerprints.

Remarks

The Office Action mailed August 13, 2002, has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-3, 6, 7, 9, 10, 13-20, 22-25 and 27-29 are now pending in this application. Claims 1-3, 6, 7, 9, 10, and 13-30 stand rejected. Claim 6 stands objected to. Claims 4, 5, 8, 11, and 12 are withdrawn from consideration. Claims 21, 26, and 30 have been cancelled.

Applicant notes the objections to the drawings. Applicant has amended the specification to explain that the remote controller 3 is shown in Figure 5. For the reasons set forth above, Applicant requests that the objections to the drawings be withdrawn.

The objection to Claim 6 due to informalities is respectfully traversed. Claim 6 is herein amended to address the informalities noted in the Office Action. For the reasons set forth above, Applicant requests that the objection to Claim 6 be withdrawn.

The rejection of Claims 1-3, 13-16, and 27-28 under 35 U.S.C. § 102(e) as being anticipated by Lane (U.S. Patent No. 5,623,552) is respectfully traversed.

Lane describes an identification card 100 which includes a card body 101, a fingerprint sensor 102 and a memory 103 for storing information related to a fingerprint of the card user. The memory 103 is contained within the card body 101 and is electrically connected to the fingerprint sensor 102. An activator 104 is electrically connected to the fingerprint sensor 102 and the memory 103 for initiating fingerprint information storage upon activation thereof. A verification device 105 is electrically connected to the memory 103, for indicating that the information related to a fingerprint has been successfully stored in the memory 103. An authenticator 107 is electrically connected to the fingerprint sensor 102 and the memory 103 for

16966-00002
PATENT

comparing information related to a sensed fingerprint with the stored fingerprint information and for producing an authentication signal if the sensed fingerprint information matches the stored fingerprint information. A controller 106 controls operations of the card 100 as will be described below. See Lane, Column 5, lines 6-47. However, Lane does not describe any sort of exposed terminal configured for connecting the card with an external terminal.

Claim 1 recites an information recording/processing device which includes "a thin fingerprint sensor," "a conversion unit configured to convert fingerprint data detected by the fingerprint sensor into digital electrical signals" and "an exposed terminal on a part of a surface of said device, said exposed terminal configured for connecting with an external terminal."

Lane does not describe nor suggest an information recording device which includes an exposed terminal configured for connecting with an external terminal. Further, Lane does not describe nor suggest any type of external connection capabilities. For the reasons set forth above, Claim 1 is submitted to be patentable over Lane.

Claims 13 and 15 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 13 and 15 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 13 and 15 likewise are patentable over Lane.

Claim 2 recites an information recording/processing device which includes "a thin fingerprint sensor," "a memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data," "a fingerprint matching unit configured to compare newly detected fingerprint data with the registered fingerprint data stored in the memory unit" and "an exposed terminal on a part of a surface of said device, said exposed terminal configured for connecting with an external terminal."

Lane does not describe nor suggest an information recording device which includes an exposed terminal configured for connecting with an external terminal. Further, Lane does not

16966-00002
PATENT

describe nor suggest any type of external connection capabilities. For the reasons set forth above, Claim 2 is submitted to be patentable over Lane.

Claims 14 and 16 depend, directly or indirectly, from independent Claim 2. When the recitations of Claims 14 and 16 are considered in combination with the recitations of Claim 2, Applicant submits that dependent Claims 14 and 16 likewise are patentable over Lane.

Claim 3 recites an information recording/processing device which includes "a thin fingerprint sensor," "a memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data," "an exposed terminal on a part of a surface of said device, said exposed terminal configured for connecting with an external terminal" and "a fingerprint matching unit configured to compare newly detected fingerprint data with the registered fingerprint data stored in the memory and to output a signal indicative of when there is a match of the fingerprints in the comparison to said exposed terminal."

Lane does not describe nor suggest an information recording device which includes an exposed terminal configured for connecting with an external terminal. Further, Lane does not describe nor suggest any type of external connection capabilities. In addition, a device which outputs a signal to a terminal indicative of when there is a match of the fingerprints also is not described. For the reasons set forth above, Claim 3 is submitted to be patentable over Lane.

Claim 27 recites a method for identifying an individual which includes "recording fingerprint data of the individual as registered fingerprint data in a memory unit of a flat information recording/processing device," "sensing a fingerprint of the individual on a fingerprint sensor of the flat information recording/processing device," "comparing the sensed fingerprint of the individual to the registered fingerprint data using a fingerprint matching unit of the flat information recording/processing device" and "outputting a result of the comparison to an exposed terminal of the recording/processing device, the exposed terminal configured to connect to an external terminal."

16966-00002
PATENT

Lane does not describe nor suggest a method which includes outputting a result of a comparison to a terminal configured for connecting with an external terminal. Further, Lane does not describe nor suggest any type of method which implies external connection capabilities. For the reasons set forth above, Claim 27 is submitted to be patentable over Lane.

Claim 28 depends from independent Claim 27. When the recitations of Claim 28 are considered in combination with the recitations of Claim 27, Applicant submits that dependent Claim 28 likewise is patentable over Lane.

For the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claims 1-3, 13-16, and 27-28 be withdrawn.

The rejection of Claims 9-10 and 18-19 under 35 U.S.C. § 102(e) as being anticipated by Hsu et al. (U.S. Patent No. 6,041,410) is respectfully traversed.

Hsu et al. describe a small handheld device 14, or fob, which communicates with a receiver 15. The fob 14 includes a fingerprint sensor 16. When the user 12 places a finger over the sensor 16 and actuates a switch, the person's fingerprint is scanned and is compared with a reference fingerprint image stored in the fob 14, which includes a fingerprint correlator for this purpose. If the comparison results in a match, the fob 14 transmits a confirming message. Principal components of the fob 14, include the fingerprint sensor 16, a processor module 20, a transceiver 22 and a battery power supply 24.

Claim 9 recites a machine/system control device which includes "a fingerprint sensor," "a fingerprint matching unit configured to compare fingerprint data detected by the fingerprint sensor with pre-registered fingerprint data," "a control mechanism configured to control operation of the machine/system control device in accordance with user-specific information in accordance with a sensed fingerprint, when there is a match of fingerprint data with pre-registered fingerprint data" and "a slot for insertion of a read/write device, said slot comprising an external terminal configured to mate with an exposed terminal of the read/write device, said

16966-00002
PATENT

external terminal being where data is passed to said control device, the data being at least fingerprint data from a user of the read/write device."

Hsu et al. do not describe nor suggest a machine/system control device which includes a slot for insertion of a read/write device, the slot having an external terminal configured to mate with an exposed terminal of the read/write device. In addition, Hsu et al. do not describe nor suggest a control mechanism configured to control operation of the machine/system control device in accordance with user-specific information in accordance with a sensed fingerprint. Further, Hsu et al. do not define the external terminal as being where data is passed to the control device, the data being at least fingerprint data from a user of the read/write device. For the reasons set forth above, Claim 9 is submitted to be patentable over Hsu et al.

Claims 18 and 19 depend, directly or indirectly, from independent Claim 9. When the recitations of Claims 18 and 19 are considered in combination with the recitations of Claim 9, Applicant submits that dependent Claims 18 and 19 likewise are patentable over Hsu et al.

Claim 10 recites a machine/system control device which includes "a fingerprint sensor," "a first memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data," "a fingerprint matching unit configured to compare fingerprint data detected by the fingerprint sensor with registered fingerprint data stored in the memory unit," "a control mechanism configured to control operation of the machine/system control device in accordance with user-specific information corresponding to the fingerprint, when there is a match of fingerprint data with the registered fingerprint data" and "a slot for insertion of a read/write device, said slot comprising an external terminal configured to mate with an exposed terminal of the read/write device, said external terminal being where data is passed to said control device, the data being at least fingerprint data from a user of the read/write device."

Hsu et al. do not describe nor suggest a machine/system control device which includes a slot for insertion of a read/write device, the slot having an external terminal configured to mate with an exposed terminal of the read/write device. In addition, Hsu et al. do not describe nor

16966-00002
PATENT

suggest a control mechanism configured to control operation of the machine/system control device in accordance with user-specific information in accordance with a sensed fingerprint. Further, Hsu et al. do not define the external terminal as being where data is passed to the control device, the data being at least fingerprint data from a user of the read/write device. For the reasons set forth above, Claim 10 is submitted to be patentable over Hsu et al.

For the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claims 9-10 and 18-19 be withdrawn.

The rejection of Claim 20 under 35 U.S.C. § 102(b) as being anticipated by Gullman et al. (U.S. Patent No. 5,280,527) is respectfully traversed.

Gullman et al. describe a biometric security mechanism 14 which generates a security token which a user inputs to an access device 12. The security token is formed, at least in part, from biometric information which may include a fingerprint, voiceprint or writing sample. See Column 3, lines 36-44. Biometric security mechanism 14 includes a power source 15, an on/off switch 16, a biometric sensor 18, a display 20, a processor 22 with on-chip random access memory, a biometric input section 33 for receiving biometric information from the biometric sensor a memory 24, a time-varying code generator 26 and display drivers 30. See Column 4, lines 39-47. Biometric security mechanism 14 has an enroll mode (for originally providing the biometric information) and a normal mode (in which the biometric information is verified).

Claim 20 recites a method for accessing a database of an information recording/processing device with a control device. The method includes "registering fingerprint data of a first person in a memory of the control device," "pressing a finger of the first person on a fingerprint sensor module of the control device to offer a fingerprint," "conditioning access to the database on a match of the offered fingerprint to fingerprint data in the memory of the control device," "connecting the information recording/processing device to the control device," "reading identification data from a memory of the information recording/processing device carried by a second person using the control device, the data read including fingerprint data,"

16966-00002
PATENT

"pressing a finger of the second person on a fingerprint sensor module of the information recording/processing device to obtain a fingerprint" and "comparing the obtained fingerprint of the second person to the fingerprint data read from the information recording/processing device."

Gullman et al. do not describe, nor suggest a method which includes conditioning access to a database on a match of the offered fingerprint to fingerprint data in the memory of a control device for a first person and reading identification data from a memory of an information recording/processing device carried by a second person using the control device. For the reasons set forth above, Claim 20 is submitted to be patentable over Gullman et al.

For the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claim 20 be withdrawn.

The rejection of Claim 25 under 35 U.S.C. § 102(e) as being anticipated by Scott et al. (U.S. Patent No. 6,111,977) is respectfully traversed.

Scott et al. describe a fingerprint recognition transmitter 10 having a housing 12 with an upper surface 16, sidewalls 18, and a lower surface. The upper surface 16 includes a fingerprint recognition area 20. Placing a finger over a cover 22 of fingerprint recognition area 20 allows fingerprint images to be read. The upper housing 12 includes an alpha-numeric keypad having depressible switches 24 for use in combination with the fingerprint recognition allowing for manipulation of data. The front wall of the housing includes an IR (or RF) transmitter and receiver 26

Switches 24 may be configured to send a password code to accompany a fingerprint image for purposes of accessing additional security locations. For instance, the keypad may initiate functions that are secured and transfer empowerment to a) initiate the transfer once the fingerprint has been stored and the device is pointed at a receiver; b) to instruct the receiver to perform certain functions such as i) key 1 transmits the print and opens all doors on a car; ii) key 2 may transmit the print and open only the drivers door on a car; iii) key 3 may start the engine;

16966-00002
PATENT

iv) key 6 may allow the print immediately following the owners print (valet) to lock and start the car over the following 24 hours; and v) key 9 may allow the print immediately following the owner print (valet) to become the new owner.

Claim 25 recites a method for controlling access to a vehicle which includes "placing a finger on a fingerprint sensor module of a remote control module," "transmitting minutiae data of the fingerprint to a receiver mounted in the vehicle," "comparing the minutiae data to data stored in a database of registered drivers," "conditioning opening of a door of the vehicle upon a match of the minutiae data to data stored in the database of registered drivers" and "limiting a speed of the vehicle in accordance with data stored in the database for a matched registered driver."

Scott et al. do not describe nor suggest a method for controlling access to a vehicle which includes limiting a speed of the vehicle in accordance with data stored in the database for a matched registered driver. Rather, Scott et al. only describe a remote function which operates using fingerprint data to control locks for automobile doors. For the reasons set forth above, Claim 25 is submitted to be patentable over Scott et al.

For the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claim 25 be withdrawn.

The rejection of Claims 29-30 under 35 U.S.C. § 102(e) as being anticipated by Borza (U.S. Patent No. 5,867,802) is respectfully traversed.

Borza describes a processor based system 8 which is modified to prevent unauthorized usage of one or more devices 18 (i.e. ignition, fuel delivery system, ABS braking, radio) related to the operation of a vehicle. The system includes biometric data input means in the form of a fingerprint scanning device 10, electronic-processing circuitry 12, a microprocessor 14 and memory 16. A logical memory block of memory 16 contains instructions that relate to the control and operation of the one or more devices 18. Column 3, lines 9-30. In operation, a fingerprint is fetched, and compared to a template. If the fetched finger print and template

16966-00002
PATENT

match, instructions that control the one or more devices 18 can be executed. Column 3, line 65 to Column 4, line 28. When system 8 includes writable memory, temporary users can be added and removed from the system, including automatic removal at a particular time. Also access to particular functions can be limited by permanent users. For example, instructions can be selected that limit the fuel flow rate to a predetermined maximum, thus essentially preventing the vehicle from exceeding a maximum speed, or that prevent temporary users from utilizing the radio or other features and options. Column 5, lines 12-20.

Claim 29 recites a method for controlling operation of a machine which includes "sensing a fingerprint of a user," "comparing the sensed fingerprint with preregistered fingerprint data," "controlling access to the machine in accordance with whether the sensed fingerprint data matches the preregistered fingerprint data" and "controlling operation of the machine in accordance with user-specific information, when there is a match of fingerprints."

Borza does not describe nor suggest a method which includes controlling operation of the machine in accordance with user-specific information. Rather, Borza describes a permanent user limiting access to functions to temporary users. Borza does not suggest any type of user-specific instructions which would differentiate between individual temporary users. For the reasons set forth above, Claim 29 is submitted to be patentable over Borza.

Claim 30 is cancelled.

For the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claims 29-30 be withdrawn.

The rejection of Claims 6 and 7 under 35 U.S.C. § 103 as being unpatentable over Lane in view of Price-Francis (U.S. Patent No. 5,815,252) is respectfully traversed.

Lane is described above. Price-Francis describes a fingerprint identification system 20 where the fingerprints of the card owner 23 are stored on the encoded portion of an optical card 25, as part of individual identification information. The fingerprint data, for example, is scanned

16966-00002
PATENT

using a scanner 35 connected to a computer 37, which is also connected to a card reader/writer 45, which is configured to store the biometric data on the card 25. Card 25 can also contain other various biometric and representative information about the individual card owner 23, recorded physically on the face of the card, or recorded in a memory 30. Preferably, only certain characteristics of a plurality of fingerprints are stored on the card 25, thereby conserving memory space. Card 25 does not include a fingerprint sensor. Therefore, Price-Francis does not describe or suggest an information recording unit which includes a fingerprint sensor.

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Lane in view of Price-Francis to produce the claimed invention. Rather, each alleged matter of design choice must always be supported by citation to some reference work recognized as standard in the pertinent art, and the Applicants given an opportunity to challenge the correctness of the assertion or the repute of the cited reference. Applicant has not been provided with the citation to any reference supporting the combination made in the rejection. Neither Lane nor Price-Francis, considered alone or in combination, describe or suggest the claimed combination. Rather, the present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Lane is cited for its teaching of a fingerprint sensor and memory on an identification card, and Price-Francis is cited for its teaching of a system where information stored on a card can be displayed using the system. Accordingly, Applicant respectfully submits that there is no suggestion or motivation to combine Lane and Price-Francis. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen, using the claimed invention as an instruction manual or "template", to piece together the teachings of the cited art in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for these reasons, Applicant requests that the Section 103 rejection of Claims 6 and 7 be withdrawn.

16966-00002
PATENT

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Jevengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaack, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Accordingly, Applicant respectfully submits that there is no suggestion or motivation to combine Lane and Price-Francis.

Applicant respectfully submits that the § 103(a) rejection of Claims 6 and 7, at least to the extent that it relies on Lane in view of Price-Francis, is improper and should be withdrawn.

Notwithstanding the propriety of the rejections, Claim 6 recites an information recording/processing system which includes a portable information recording unit and an information processing unit. The portable information recording unit includes "a thin fingerprint sensor, a first memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data, a second memory unit in which user-specific information is kept, and an exposed terminal configured for connecting with an information processing unit." The information processing unit includes "an external terminal configured to interface with said external terminal of said portable information recording unit, a fingerprint matching unit configured to compare newly detected fingerprint data, received at said external terminal, with the registered fingerprint data stored in the first memory unit, received at said terminal, and a display unit configured to display the user-specific information stored in said second memory unit, said information processing unit configured to display the user-specific information in the display unit when there is a match of fingerprints."

Lane in view of Price-Francis do not describe nor suggest a information recording/processing system which includes a portable information recording unit and an

16966-00002
PATENT

information processing unit where the portable information recording unit includes a fingerprint sensor and an exposed terminal configured for connecting with an information processing unit. In addition, Lane in view of Price-Francis do not describe nor suggest an information processing unit configured to interface with a portable information recording unit.

For the reasons set forth above, Claim 6 is submitted to be patentable over Lane in view of Price-Francis.

Claim 7 depends from independent Claim 6. When the recitations of Claim 7 are considered in combination with the recitations of Claim 6, Applicant submits that dependent Claim 7 likewise is patentable over Lane in view of Price-Francis.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 6 and 7 be withdrawn.

The rejection of Claim 17 under 35 U.S.C. § 103 as being unpatentable over Lane in view of Price-Francis and further in view of Borza is respectfully traversed.

Lane, Price-Francis, and Borza are all described above. Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Lane in view of Price-Francis and further in view of Borza to produce the claimed invention. Rather, each alleged matter of design choice must always be supported by citation to some reference work recognized as standard in the pertinent art, and the Applicants given an opportunity to challenge the correctness of the assertion or the repute of the cited reference. Applicant has not been provided with the citation to any reference supporting the combination made in the rejection. Neither Lane nor Price-Francis nor Borza, considered alone or in combination, describe or suggest the claimed combination. Rather, the present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Lane is cited for its teaching of a

16966-00002
PATENT

fingerprint sensor and memory on an identification card, Price-Francis is cited for its teaching of a system where information stored on a card can be displayed using the system, and Borza is cited for teaching of limited controls to a temporary user. Accordingly, Applicant respectfully submits that there is no suggestion or motivation to combine Lane, Price-Francis and Borza. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen, using the claimed invention as an instruction manual or "template", to piece together the teachings of the cited art in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for these reasons, Applicant requests that the Section 103 rejection of Claim 17 be withdrawn.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaack, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Accordingly, Applicant respectfully submits that there is no suggestion or motivation to combine Lane, Price-Francis and Borza.

Claim 17 depends from independent Claim 6. Notwithstanding the propriety of the rejections, Claim 6 recites an information recording/processing system which includes a portable information recording unit and an information processing unit. The portable information recording unit includes "a thin fingerprint sensor, a first memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data, a second memory unit in which user-specific information is kept, and an exposed terminal configured for connecting with an information processing unit." The information processing unit includes "an external terminal configured to interface with said exposed terminal of said portable information

16966-00002
PATENT

recording unit, a fingerprint matching unit configured to compare newly detected fingerprint data, received at said external terminal, with the registered fingerprint data stored in the first memory unit, received at said external terminal, and a display unit configured to display the user-specific information stored in said second memory unit, said information processing unit configured to display the user-specific information in the display unit when there is a match of fingerprints."

Lane in view of Price-Francis and further in view of Borza do not describe nor suggest a information recording/processing system which includes a portable information recording unit and an information processing unit where the portable information recording unit includes a fingerprint sensor and an exposed terminal configured for connecting with an information processing unit. For the reasons set forth above, Claim 6 is submitted to be patentable over Lane in view of Price-Francis and further in view of Borza.

Claim 17 depends from independent Claim 6. When the recitations of Claim 17 are considered in combination with the recitations of Claim 6, Applicant submits that dependent Claim 17 likewise is patentable over Lane in view of Price-Francis and further in view of Borza.

Further, and specifically to Claim 17 none of Lane, Price-Francis, and Borza describe or suggest any type of second fingerprint sensor, as is recited in Claim 17. For these reasons, and those reasons set forth above, Claim 17 is submitted to be patentable over Lane in view of Price-Francis and further in view of Borza.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claim 17 be withdrawn.

The rejection of Claims 21-24 under 35 U.S.C. § 103 as being unpatentable over Gullman et al. in view of Price-Francis is respectfully traversed.

Claim 21 is cancelled. Gullman et al. and Price-Francis are described above. Applicant respectfully submit that the Section 103 rejection of the presently pending claims is not a proper

16966-00002
PATENT

rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Gullman et al. in view of Price-Francis to produce the claimed invention. Rather, each alleged matter of design choice must always be supported by citation to some reference work recognized as standard in the pertinent art, and the Applicants given an opportunity to challenge the correctness of the assertion or the repute of the cited reference. Applicant has not been provided with the citation to any reference supporting the combination made in the rejection. Neither Gullman et al. nor Price-Francis, considered alone or in combination, describe or suggest the claimed combination. Rather, the present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Gullman et al. is cited for its teaching of a biometric access system, and Price-Francis is cited for its teaching of a system where information stored on a card can be displayed using the system. Accordingly, Applicant respectfully submits that there is no suggestion or motivation to combine Gullman et al. and Price-Francis. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen, using the claimed invention as an instruction manual or "template", to piece together the teachings of the cited art in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for these reasons, Applicant requests that the Section 103 rejection of Claims 21-24 be withdrawn.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaack, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any

16966-00002
PATENT

reasonable expectation of success has been shown. Accordingly, Applicant respectfully submits that there is no suggestion or motivation to combine Gullman et al. and Price-Francis.

Notwithstanding the propriety of the rejections, Claims 22-24 depend from independent Claim 20 which recites a method for accessing a database of an information recording/processing device with a control device. The method includes "registering fingerprint data of a first person in a memory of the control device," "pressing a finger of the first person on a fingerprint sensor module of the control device to offer a fingerprint," "conditioning access to the database on a match of the offered fingerprint to fingerprint data in the memory of the control device," "connecting the information recording/processing device to the control device," "reading identification data from a memory of the information recording/processing device carried by a second person using the control device, the data read including fingerprint data," "pressing a finger of the second person on a fingerprint sensor module of the information recording/processing device to obtain a fingerprint" and "comparing the obtained fingerprint of the second person to the fingerprint data read from the information recording/processing device."

Gullman et al. in view of Price-Francis do not describe, nor suggest a method which includes conditioning access to a database on a match of the offered fingerprint to fingerprint data in the memory of a control device for a first person and reading identification data from a memory of an information recording/processing device carried by a second person using the control device. For the reasons set forth above, Claim 20 is submitted to be patentable over Gullman et al. in view of Price-Francis.

Claim 21 is cancelled. Claims 22-24 depend from independent Claim 20. When the recitations of Claim 22-24 are considered in combination with the recitations of Claim 20, Applicant submits that dependent Claims 22-24 likewise are patentable over Gullman et al. in view of Price-Francis.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 21-24 be withdrawn.

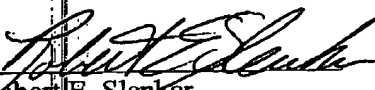
16966-00002
PATENT

The rejection of Claim 26 under 35 U.S.C. § 103 as being unpatentable over Scott et al. in view of Borza is respectfully traversed.

Claim 26 is cancelled. Therefore, Applicant respectfully requests that the Section 103 rejection of Claim 26 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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16966-00002
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Tamori

Art Unit: 2635

Serial No.: 09/424,685

Examiner: C. Yang

Filed: January 11, 2000

For: INFORMATION
RECORDER/PROCESSOR AND
EQUIPMENT/SYSTEM
CONTROLLER BOTH
PROVIDED WITH
FINGERPRINT SENSOR

SUBMISSION OF MARKED UP PARAGRAPHS AND CLAIMS

Hon. Commissioner for Patents
Washington, D.C. 20231

In furtherance of the amendment in response to the Office Action dated August 13, 2002, submitted separately herewith, Applicant hereby submits marked up paragraphs and claims, in accordance with 37 C.F.R. §1.121(b)(1)(iii) and 37 C.F.R. §1.121(c)(1)(ii), for the amendments therein:

IN THE SPECIFICATION

Amend the paragraph at page 12, line 23 to page 13, line 6 as follows:

The car driving system consists of a remote controller 3 (shown in Figure 5), a photocell 4a for receiving infrared light installed on the outside of the driver's side door of the car, data input keys 4b installed on the dashboard inside the car, and a control circuit 4c attached below the console. The photocell 4a which is meant for receiving data from the remote controller 3, the data input keys 4b, and the control circuit 4c constitute the vehicle velocity control circuit.

16966-00002
PATENTIN THE CLAIMS

Please cancel Claims 21, 26 and 30.

1. (Twice Amended) A flat information recording/processing device comprising:

a thin fingerprint sensor;

[and] a conversion unit configured to convert fingerprint data detected by the fingerprint sensor into digital electrical signals; and

an exposed terminal on a part of a surface of said device, said exposed terminal configured for connecting with an external terminal.
2. (Twice Amended) A flat information recording/processing device comprising:

a thin fingerprint sensor; [,]

a memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data; [, and]

a fingerprint matching unit configured to compare newly detected fingerprint data with the registered fingerprint data stored in the memory unit; and

an exposed terminal on a part of a surface of said device, said exposed terminal configured for connecting with an external terminal.
3. (Twice Amended) A flat information recording/processing device comprising:

a thin fingerprint sensor; [,]

16966-00002
PATENT

a memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data₁[,]

an exposed terminal on a part of a surface of said device, said exposed terminal configured for connecting with an external terminal; and

a fingerprint matching unit configured to compare newly detected fingerprint data with the registered fingerprint data stored in the memory and to output a signal indicative of when there is a match of the fingerprints in the comparison to said exposed terminal.

6. (Twice Amended) An[A flat] information recording[]/processing [device]system comprising:

a portable information recording unit [equipped with]comprising a thin fingerprint sensor, a first memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data₁[and] a second memory unit in which user-specific information is kept, and an exposed terminal configured for connecting with an information processing unit;
and

an information processing unit [that is equipped with]comprising an external terminal configured to interface with said terminal of said portable information recording unit, a fingerprint matching unit configured to compare newly detected fingerprint data, received at said external terminal, with the registered fingerprint data stored in the first memory unit, received at said external terminal, and a display unit configured to display the user-specific information stored in [the]said second memory unit, [and]said information processing unit configured to display the user-specific information in the display unit when there is a match of fingerprints.

9. (Twice Amended) A machine/system control device comprising: []

a fingerprint sensor₁[,]

16966-00002
PATENT

a fingerprint matching unit configured to compare fingerprint data detected by the fingerprint sensor with pre-registered fingerprint data;], and]

a control mechanism configured to control operation of the machine/system control device in accordance with user-specific information in accordance with a sensed fingerprint, when there is a match of fingerprint data with pre-registered fingerprint data; and

a slot for insertion of a read/write device, said slot comprising an external terminal configured to mate with an exposed terminal of the read/write device, said external terminal being where data is passed to said control device, the data being at least fingerprint data from a user of the read/write device.

10. (Twice Amended) A machine/system control device comprising:

a fingerprint sensor;],]

a first memory unit configured to store fingerprint data detected by the fingerprint sensor as registered fingerprint data;],]

a fingerprint matching unit configured to compare fingerprint data detected by the fingerprint sensor with registered fingerprint data stored in the memory unit;], and]

a control mechanism configured to control operation of the machine/system control device in accordance with user-specific information corresponding to the fingerprint, when there is a match of fingerprint data with the registered fingerprint data; and

a slot for insertion of a read/write device, said slot comprising an external terminal configured to mate with an exposed terminal of the read/write device, said external terminal being where data is passed to said control device, the data being at least fingerprint data from a user of the read/write device.

16966-00002
PATENT

17. (Once Amended) An information recording/processing [unit]system in accordance with claim 6 [and further comprising] wherein said information processing unit comprises a second thin fingerprint sensor and a third memory unit configured to store fingerprint data detected by the second fingerprint sensor as registered fingerprint data.

18. (Once Amended) A machine/system control device in accordance with claim 9 in which the user-specific information is [age] fingerprint data from a person who has authority to inspect or rewrite information in the read/write device.

20. (Once Amended) A method for accessing a database of an information recording/processing device with a control device, said method comprising the steps of:

registering fingerprint data of a first person in a memory of the control device;[:]

pressing a finger of [a user]the first person on a fingerprint sensor module of the control device to offer a fingerprint;[and]

conditioning access to the database on a match of the offered fingerprint to fingerprint data in the memory of the control device;

connecting the information recording/processing device to the control device;

reading identification data from a memory of the information recording/processing device carried by a second person using the control device, the data read including fingerprint data;

pressing a finger of the second person on a fingerprint sensor module of the information recording/processing device to obtain a fingerprint; and

comparing the obtained fingerprint of the second person to the fingerprint data read from the information recording/processing device.

16966-00002
PATENT

25. (Once Amended) A method for controlling access to a vehicle, said method comprising:

placing a finger on a fingerprint sensor module of a remote control module;
transmitting minutiae data of the fingerprint to a receiver mounted in the vehicle;
comparing the minutiae data to data stored in a database of registered drivers; [and]
conditioning opening of a door of the vehicle upon a match of the minutiae data to data stored in the database of registered drivers; and
limiting a speed of the vehicle in accordance with data stored in the database for a matched registered driver.

27. (Once Amended) A method for identifying [a] an individual comprising the steps of:

recording fingerprint data of the individual as registered fingerprint data in a memory unit of a flat information recording/processing device;

sensing a fingerprint of the individual on a fingerprint sensor of the flat information recording/processing device; [and]

comparing the sensed fingerprint of the individual to the registered fingerprint data using a fingerprint matching unit of the flat information recording/processing device; and

outputting a result of the comparison to an exposed terminal of the recording/processing device, the exposed terminal configured to connect to an external terminal.

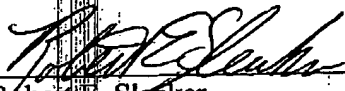
29. (Once Amended) A method for controlling operation of a machine comprising the steps of:

sensing a fingerprint of a user;

16966-00002
PATENT

comparing the sensed fingerprint with preregistered fingerprint data; [and]
controlling access to the machine in accordance with whether the sensed fingerprint data
matches the preregistered fingerprint data; and
controlling operation of the machine in accordance with user-specific information, when
there is a match of fingerprints.

Respectfully Submitted,



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